

SECTION 11 66 23
GYMNASIUM EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Dismantling and reinstallation of existing backstop components to allow staging of scheduled work in existing window openings nearby.
- 2. Basketball equipment.
- 3. Safety pads.

B. Related Requirements:

- 1. Section 11 66 53 "Gymnasium Dividers" for gymnasium divider curtain systems.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.

- B. Shop Drawings: For gymnasium equipment.

- 1. Include plans, elevations, sections, and attachment details.

- C. Samples for Verification: For the following products:

- 1. Basketball Net: Full size.
- 2. Pad Fabric: Wall padding minimum 3 inches square, and corner and column Samples minimum 3 inches long, with specified treatments applied. Mark face of material.

1.5 INFORMATIONAL SUBMITTALS

- A. For each existing backstop to be dismantled and reinstalled, documentation of the existing installation to include the following.
 - 1. Overall photographs from all sides of backstop.
 - 2. Detailed photographs at critical or complex connections.
 - 3. Lists of labeled components to be retained.
 - a. One list for each backstop to be dismantled.
 - b. Identify each component in the list by a tracking number corresponding to a label to be placed on the component.
 - 1) Indicate if the component is damaged or shows signs of excessive wear.
- B. Sample Warranty: For special warranty.

1.6 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: For gymnasium equipment to include in operation and maintenance manuals.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: An entity that employs installers and supervisors who are trained and approved by manufacturer.

1.8 FIELD CONDITIONS

- A. Field measurements for backstop dismantling and reinstallation
 - 1. Before starting work, establish:
 - a. Plan locations of existing centers of basketball goal rims with respect to existing gymnasium walls.
 - b. Elevations of rim tops above existing finish floor.
 - 2. Take other measurements as required to ensure backstops can be reinstalled with new goals in locations established above.

1.9 WARRANTY

- A. Special Warranty: Manufacturer agrees to repair or replace components of gymnasium equipment that fail in materials or workmanship within specified warranty period.
 - 1. Warranty Period: 10 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 BASKETBALL EQUIPMENT

- A. Goal-Mounting Assembly: Compatible with goal, backboard, and backstop; with manufacturer's standard hole pattern for goal attachment.
- B. Basketball Goal: Basket ring complete with flanges, braces, attachment plate, and evenly spaced loops welded around underside of ring.
 - 1. Single-Rim Basket Ring Competition Goal: Materials, dimensions, and fabrication complying with referenced standard rules.
 - 2. Type:
 - a. Fixed: Nonmovable.
 - 3. Finish: Manufacturer's standard finish.
- C. Basketball Net: 12-loop-mesh net, between 15 and 18 inches long, sized to fit ring diameter, and as follows:
 - 1. Cord: Made from white nylon.

2.2 SAFETY PADS

- A. Basis of Design Product: Subject to compliance with requirements, Porter Athletics Equipment Company: No. 00570 HiNRG FR-Safpad fire-retardant wall pads or comparable product by one of the following:
 - 1. Draper Inc.
 - 2. Jaypro Sports, LLC.
 - 3. Performance Sports Systems.
 - 4. Spalding Equipment.
- B. Source Limitations: Obtain from single source from single manufacturer.
- C. Surface-Burning Characteristics: Comply with ASTM E84; testing by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.
 - 1. Flame-Spread Index: 25 or less.
 - 2. Smoke-Developed Index: 450 or less.
- D. Pad Coverings: Provide safety pad fabric covering that is fabricated from puncture- and tear-resistant, PVC-coated polyester or nylon-reinforced PVC fabric, minimum 14-oz./sq. yd. and treated with fungicide for mildew resistance; with surface-burning characteristics indicated.
- E. Wall Safety Pads: Padded wall wainscot panels designed to be attached in a continuous row; each panel section consisting of fill laminated to backer board, with visible surfaces fully

covered by seamless fabric covering, free of sag and wrinkles and firmly attached to back of backer board.

1. Backer Board: Minimum 3/8-inch-thick plywood, mat formed, or composite panel.
 2. Fill: Multiple-impact-resistant foam, minimum 2-inch-thick polyurethane, 3.5-lb/cu. ft. density.
 3. Size: Each panel section of manufacturer's standard dimensions as indicated on Drawings.
 4. Number of Modular Panel Sections: As indicated on Drawings.
 5. Installation Method: Concealed mounting Z-clips and 1-inch bottom fabric attachment flange with exposed fasteners.
 6. Fabric Covering Color(s): As selected by Architect from manufacturer's full range for one color(s).
 7. Graphics: Custom graphics as indicated on Drawings.
- F. Cutout Trim: Manufacturer's standard flanged cutout trim kits for fitting pads around switches, receptacles, and other obstructions.
1. Color: Gray or Black, as selected by Architect.

2.3 MATERIALS

- A. Support Cable: Manufacturer's standard galvanized-stranded-steel wire rope with a breaking strength of 7000 lb. Provide fittings according to the wire rope manufacturer's written instructions for size, number, and installation method.
- B. Support Chain and Fittings: For chains used for overhead lifting, provide Grade 80 heat-treated alloy-steel chains, according to ASTM A391/A391M, with commercial-quality, hot-dip galvanized steel connectors and hangars.
- C. General-Purpose Chain: For chains not used for overhead lifting, provide carbon steel chain, according to ASTM A413/A413M (Grade 30 proof coil chain or higher grade recommended by gymnasium equipment manufacturer). Provide coating type, chain size, number, and installation method according to manufacturer's written instructions.
- D. Castings and Hangers: Malleable iron, according to ASTM A47/A47M; grade as required for structural loading.
- E. Anchors, Fasteners, Fittings, and Hardware: Gymnasium equipment manufacturer's standard corrosion-resistant or noncorrodible units; concealed.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, areas, and conditions with Installer present for compliance with requirements for court layout, alignment of mounting substrates, installation tolerances,

operational clearances, accurate locations of connections to building electrical system, and other conditions affecting performance of the Work.

1. Verify critical dimensions.
2. Examine supporting structure, subgrades, subfloors, and footings below finished floor.
3. Examine wall assemblies, where reinforced to receive anchors and fasteners, to verify that locations of concealed reinforcements are clearly marked. Locate reinforcements and mark locations.

- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 REMOVALS

- A. At each existing backstop, remove and dispose of existing net, goal, and goal-mounting assembly back to existing backboard to remain.

3.3 INSTALLATION, GENERAL

- A. Install goal mounting assemblies, goals, and nets on each backstop, comply with manufacturer's written installation instructions and competition rules for each type of gymnasium equipment.
- B. Install gymnasium equipment after other finishing operations, including painting, have been completed unless otherwise indicated.
- C. Permanently Placed Gymnasium Equipment and Components: Install rigid, level, plumb, square, and true; anchored securely to supporting structure; positioned at locations and elevations indicated; in proper relationship to adjacent construction; and aligned with court layout.
1. Operating Gymnasium Equipment: Verify clearances for movable components of gymnasium equipment throughout entire range of operation and for access to operating components.
- D. Anchoring to In-Place Construction: Use anchors and fasteners where necessary to secure built-in and permanently placed gymnasium equipment to structural support and to properly transfer load to in-place construction.

3.4 EXISTING BACKSTOP DISMANTLING AND REINSTALLATION

- A. Dismantle, store, and reinstall existing backstops indicated in drawings in accordance with the following requirements to allow staging of scheduled work in existing window openings nearby.
- B. Inspection
1. Inspect backstop assemblies and their individual components for damage or signs of excessive wear both before starting dismantling work and as work is underway.
 2. Identify damaged or worn components separately in documentation.

C. Preparation: Document existing installations to be dismantled.

1. Label each component to be removed and retained in coordination with requirements of Paragraph 1.5.A of this Section.
2. Compile documentation listed in Paragraph 1.5.A. Submit before starting work.

D. Execution

1. Remove and dispose of existing nets, goals, and goal-mounting assemblies.
2. Dismantle backstops. Protect and store in temporary facilities.
 - a. At cable-hung backstops, dispose of existing cable and cable securement fittings. Do not reuse existing.
3. Reinstall backstop components after nearby work is complete.
 - a. Provide new support cable and cable securement fittings at cable-hung backstops. Do not reuse existing.
4. Adjust and align backstops to allow installation of goals within one inch of plan locations and one-eighth inch of elevations established by field measurements.

3.5 INSTALLATION OF SAFETY PADS

- A. Mount with bottom edge at 4 inches above finished floor.
- B. Cutout Trim: Limit cuts in face of padding so that cuts are securely and fully concealed behind trim-kit flange.

END OF SECTION